SEQUENCE LISTING

<110> Unitectra Inc.

<120> Pharmaceutical Compositions for Treating or Preventing Cancer

<130> E 2862 EP

<140>
<141>

<160> 13

<170> PatentIn Ver. 2.1

<210> 1
<211> 1881
<212> DNA
<213> Mus musculus

<220>
<221> CDS
<222> (1)..(1881)

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  1               5                  10                  15

gct ctg ctg gct gtg ggg gcc cta gaa gga tcc agg aat cag gac tgg   96
Ala Leu Leu Ala Val Gly Ala Leu Glu Gly Ser Arg Asn Gln Asp Trp
            20                  25                  30

ctt ggt gtc cca aga caa ctt gta act aaa acc tgg aac agg cag ctg   144
Leu Gly Val Pro Arg Gln Leu Val Thr Lys Thr Trp Asn Arg Gln Leu
        35                  40                  45

tac ccc gag tgg aca gag gtg cag ggg tct aac tgc tgg aga ggt ggc   192
Tyr Pro Glu Trp Thr Glu Val Gln Gly Ser Asn Cys Trp Arg Gly Gly
    50                  55                  60

cag gta tct ctg agg gtc att aat gat ggg cct aca ctg gtt ggt gca   240
Gln Val Ser Leu Arg Val Ile Asn Asp Gly Pro Thr Leu Val Gly Ala
65                  70                  75                  80

aat gcc tcc ttt tcc att gcc ctg cac ttc cct gga agt caa aag gta   288
Asn Ala Ser Phe Ser Ile Ala Leu His Phe Pro Gly Ser Gln Lys Val
                85                  90                  95

cta ccg gat ggt cag gtt atc tgg gcc aac aac acc atc atc aat ggg   336
Leu Pro Asp Gly Gln Val Ile Trp Ala Asn Asn Thr Ile Ile Asn Gly
            100                 105                 110

agc cag gtg tgg gga gga cag cca gtg tat cca cag gag cct gat gat   384
Ser Gln Val Trp Gly Gly Gln Pro Val Tyr Pro Gln Glu Pro Asp Asp
        115                 120                 125

gcc tgt gtc ttc cct gac ggt gga ccc tgc cca tct ggt cct aaa cct   432
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Ala Cys Val Phe Pro Asp Gly Gly Pro Cys Pro Ser Gly Pro Lys Pro
    130                 135                 140

ccg aag aga agc ttt gtt tat gtt tgg aag acc tgg gga aaa tac tgg   480
Pro Lys Arg Ser Phe Val Tyr Val Trp Lys Thr Trp Gly Lys Tyr Trp
145                 150                 155                 160

caa gtt ctg ggg ggt cca gtg tcc agg tcg agc att gct acg cgc cac   528
Gln Val Leu Gly Gly Pro Val Ser Arg Ser Ser Ile Ala Thr Arg His
                165                 170                 175

gca aag ctg ggc aca cac aca atg gaa gtg act gtc tac cac cga cgg   576
Ala Lys Leu Gly Thr His Thr Met Glu Val Thr Val Tyr His Arg Arg
            180                 185                 190

ggt tcc cag agc tac gtg ccc ctt gct cac gcc agt tca acc ttc acc   624
Gly Ser Gln Ser Tyr Val Pro Leu Ala His Ala Ser Ser Thr Phe Thr
        195                 200                 205

att act gac cag gta cct ttc tcc gtg agt gtg tcc cag cta cag gcc   672
Ile Thr Asp Gln Val Pro Phe Ser Val Ser Val Ser Gln Leu Gln Ala
    210                 215                 220

ttg gac gga gag acc aag cac ttc ctg aga aat cat cct ctc atc ttt   720
Leu Asp Gly Glu Thr Lys His Phe Leu Arg Asn His Pro Leu Ile Phe
225                 230                 235                 240

gcc ctt cag ctc cac gac ccc agt ggt tat ttg gcc gag gcc gac ctc   768
Ala Leu Gln Leu His Asp Pro Ser Gly Tyr Leu Ala Glu Ala Asp Leu
                245                 250                 255

tcc tac aca tgg gac ttt gga gat ggt act ggg acc ctg atc tct cgg   816
Ser Tyr Thr Trp Asp Phe Gly Asp Gly Thr Gly Thr Leu Ile Ser Arg
            260                 265                 270

gca ctt gat gtc act cac act tac ctg gag tcg ggc tca gtc act gcc   864
Ala Leu Asp Val Thr His Thr Tyr Leu Glu Ser Gly Ser Val Thr Ala
        275                 280                 285

cag gtg gta ctg cag gct gcc att cct ctt gtt tcc tgt ggt tcc tcc   912
Gln Val Val Leu Gln Ala Ala Ile Pro Leu Val Ser Cys Gly Ser Ser
    290                 295                 300

cca gtc ccg ggt acc aca gat ggc tac atg cca act gca gaa gca cct   960
Pro Val Pro Gly Thr Thr Asp Gly Tyr Met Pro Thr Ala Glu Ala Pro
305                 310                 315                 320

gga acc aca tct agg caa gga acc act aca aaa gtt gtg ggt act aca  1008
Gly Thr Thr Ser Arg Gln Gly Thr Thr Thr Lys Val Val Gly Thr Thr
                325                 330                 335

cct ggc cag atg cca act aca cag ccc tct gga acc aca gtt gta caa  1056
Pro Gly Gln Met Pro Thr Thr Gln Pro Ser Gly Thr Thr Val Val Gln
            340                 345                 350

atg cca acc aca gag gtc aca gct act aca tct gag cag atg ctg acc  1104
Met Pro Thr Thr Glu Val Thr Ala Thr Thr Ser Glu Gln Met Leu Thr
        355                 360                 365
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tca gcg gtc ata gat acc aca ctg gca gag gtg tca act aca gag ggt   1152
Ser Ala Val Ile Asp Thr Thr Leu Ala Glu Val Ser Thr Thr Glu Gly
    370                 375                 380

aca ggt acc aca ccc aca agg cct tct gga acc acc gtt gca caa gca   1200
Thr Gly Thr Thr Pro Thr Arg Pro Ser Gly Thr Thr Val Ala Gln Ala
385                 390                 395                 400

aca acc aca gag ggt cca gat gcc agc cca ttg ctg ccc aca caa agt   1248
Thr Thr Thr Glu Gly Pro Asp Ala Ser Pro Leu Leu Pro Thr Gln Ser
                405                 410                 415

tct aca ggg tcc att agc cct cta ctg gat gac acc gac acc ata atg   1296
Ser Thr Gly Ser Ile Ser Pro Leu Leu Asp Asp Thr Asp Thr Ile Met
            420                 425                 430

ctt gtg aag aga caa gtt ccc ctg gac tgt gtt cta tat cga tat ggt   1344
Leu Val Lys Arg Gln Val Pro Leu Asp Cys Val Leu Tyr Arg Tyr Gly
        435                 440                 445

tct ttc tcc ctc gcc ctg gac att gtc cag ggt att gaa agt gct gag   1392
Ser Phe Ser Leu Ala Leu Asp Ile Val Gln Gly Ile Glu Ser Ala Glu
    450                 455                 460

atc ctg cag gct gtg cca ttc agt gaa ggg gat gca ttt gag ctg act   1440
Ile Leu Gln Ala Val Pro Phe Ser Glu Gly Asp Ala Phe Glu Leu Thr
465                 470                 475                 480

gtg tcc tgc caa ggc ggg cta ccc aag gaa gcc tgt atg gac att tca   1488
Val Ser Cys Gln Gly Gly Leu Pro Lys Glu Ala Cys Met Asp Ile Ser
                485                 490                 495

tca cca ggg tgc cag ccc cct gcc cag agg ctg tgc cag tct gtt cca   1536
Ser Pro Gly Cys Gln Pro Pro Ala Gln Arg Leu Cys Gln Ser Val Pro
            500                 505                 510

ccg agc cca gac tgc cag ctg gtt cta cac caa gtg ctg aaa ggt ggc   1584
Pro Ser Pro Asp Cys Gln Leu Val Leu His Gln Val Leu Lys Gly Gly
        515                 520                 525

tca ggg aca tat tgc ctc aat gtg tct ttg gct gac gcc aac agc ctg   1632
Ser Gly Thr Tyr Cys Leu Asn Val Ser Leu Ala Asp Ala Asn Ser Leu
    530                 535                 540

gca gtg gcc agc acc caa ctt gtt gtt cct ggt caa gac ggt ggc ctt   1680
Ala Val Ala Ser Thr Gln Leu Val Val Pro Gly Gln Asp Gly Gly Leu
545                 550                 555                 560

ggg cag gct ccc ttg ctt gta ggt atc ttg ctg gtg ttg gtg gct gtg   1728
Gly Gln Ala Pro Leu Leu Val Gly Ile Leu Leu Val Leu Val Ala Val
                565                 570                 575

gtc ctt gca tct ctg ata cta ggc ata gac tta aga agc agg gct cag   1776
Val Leu Ala Ser Leu Ile Leu Gly Ile Asp Leu Arg Ser Arg Ala Gln
            580                 585                 590

ttt ccc aaa tgc cac atg gta gca ctc act gct gcg cct gcc tcc ggt   1824
Phe Pro Lys Cys His Met Val Ala Leu Thr Ala Ala Pro Ala Ser Gly
        595                 600                 605
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ctt cgc gcc cgc ggc ctt gga gaa aac agc ccg ctc ctc agt gga cag   1872
Leu Arg Ala Arg Gly Leu Gly Glu Asn Ser Pro Leu Leu Ser Gly Gln
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cag gtc tga                                                      1881
Gln Val
625
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            20                  25                  30

Leu Gly Val Pro Arg Gln Leu Val Thr Lys Thr Trp Asn Arg Gln Leu
        35                  40                  45

Tyr Pro Glu Trp Thr Glu Val Gln Gly Ser Asn Cys Trp Arg Gly Gly
    50                  55                  60

Gln Val Ser Leu Arg Val Ile Asn Asp Gly Pro Thr Leu Val Gly Ala
65                  70                  75                  80

Asn Ala Ser Phe Ser Ile Ala Leu His Phe Pro Gly Ser Gln Lys Val
                85                  90                  95

Leu Pro Asp Gly Gln Val Ile Trp Ala Asn Asn Thr Ile Ile Asn Gly
            100                 105                 110

Ser Gln Val Trp Gly Gly Gln Pro Val Tyr Pro Gln Glu Pro Asp Asp
        115                 120                 125

Ala Cys Val Phe Pro Asp Gly Gly Pro Cys Pro Ser Gly Pro Lys Pro
    130                 135                 140

Pro Lys Arg Ser Phe Val Tyr Val Trp Lys Thr Trp Gly Lys Tyr Trp
145                 150                 155                 160

Gln Val Leu Gly Gly Pro Val Ser Arg Ser Ser Ile Ala Thr Arg His
                165                 170                 175

Ala Lys Leu Gly Thr His Thr Met Glu Val Thr Val Tyr His Arg Arg
            180                 185                 190

Gly Ser Gln Ser Tyr Val Pro Leu Ala His Ala Ser Ser Thr Phe Thr
        195                 200                 205

Ile Thr Asp Gln Val Pro Phe Ser Val Ser Val Ser Gln Leu Gln Ala
    210                 215                 220

Leu Asp Gly Glu Thr Lys His Phe Leu Arg Asn His Pro Leu Ile Phe
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225                 230                 235                 240

Ala Leu Gln Leu His Asp Pro Ser Gly Tyr Leu Ala Glu Ala Asp Leu
                245                 250                 255

Ser Tyr Thr Trp Asp Phe Gly Asp Gly Thr Gly Thr Leu Ile Ser Arg
            260                 265                 270

Ala Leu Asp Val Thr His Thr Tyr Leu Glu Ser Gly Ser Val Thr Ala
        275                 280                 285

Gln Val Val Leu Gln Ala Ala Ile Pro Leu Val Ser Cys Gly Ser Ser
    290                 295                 300

Pro Val Pro Gly Thr Thr Asp Gly Tyr Met Pro Thr Ala Glu Ala Pro
305                 310                 315                 320

Gly Thr Thr Ser Arg Gln Gly Thr Thr Thr Lys Val Val Gly Thr Thr
                325                 330                 335

Pro Gly Gln Met Pro Thr Thr Gln Pro Ser Gly Thr Thr Val Val Gln
            340                 345                 350

Met Pro Thr Thr Glu Val Thr Ala Thr Thr Ser Glu Gln Met Leu Thr
        355                 360                 365

Ser Ala Val Ile Asp Thr Thr Leu Ala Glu Val Ser Thr Thr Glu Gly
    370                 375                 380

Thr Gly Thr Thr Pro Thr Arg Pro Ser Gly Thr Thr Val Ala Gln Ala
385                 390                 395                 400

Thr Thr Thr Glu Gly Pro Asp Ala Ser Pro Leu Leu Pro Thr Gln Ser
                405                 410                 415

Ser Thr Gly Ser Ile Ser Pro Leu Leu Asp Asp Thr Asp Thr Ile Met
            420                 425                 430

Leu Val Lys Arg Gln Val Pro Leu Asp Cys Val Leu Tyr Arg Tyr Gly
        435                 440                 445

Ser Phe Ser Leu Ala Leu Asp Ile Val Gln Gly Ile Glu Ser Ala Glu
    450                 455                 460

Ile Leu Gln Ala Val Pro Phe Ser Glu Gly Asp Ala Phe Glu Leu Thr
465                 470                 475                 480

Val Ser Cys Gln Gly Gly Leu Pro Lys Glu Ala Cys Met Asp Ile Ser
                485                 490                 495

Ser Pro Gly Cys Gln Pro Pro Ala Gln Arg Leu Cys Gln Ser Val Pro
            500                 505                 510

Pro Ser Pro Asp Cys Gln Leu Val Leu His Gln Val Leu Lys Gly Gly
        515                 520                 525

Ser Gly Thr Tyr Cys Leu Asn Val Ser Leu Ala Asp Ala Asn Ser Leu
    530                 535                 540
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Ala Val Ala Ser Thr Gln Leu Val Val Pro Gly Gln Asp Gly Gly Leu
545 550 555 560

Gly Gln Ala Pro Leu Leu Val Gly Ile Leu Leu Val Leu Val Ala Val
565 570 575

Val Leu Ala Ser Leu Ile Leu Gly Ile Asp Leu Arg Ser Arg Ala Gln
580 585 590

Phe Pro Lys Cys His Met Val Ala Leu Thr Ala Ala Pro Ala Ser Gly
595 600 605

Leu Arg Ala Arg Gly Leu Gly Glu Asn Ser Pro Leu Leu Ser Gly Gln
610 615 620

Gln Val
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<212> DNA
<213> Homo sapiens

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<222> (12)..(2018)

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Met Asp Leu Val Leu Lys Arg Cys Leu Leu His Leu Ala
1 5 10

gtg ata ggt gct ttg ctg gct gtg ggg gct aca aaa gta ccc aga aac 98
Val Ile Gly Ala Leu Leu Ala Val Gly Ala Thr Lys Val Pro Arg Asn
15 20 25

cag gac tgg ctt ggt gtc tca agg caa ctc aga acc aaa gcc tgg aac 146
Gln Asp Trp Leu Gly Val Ser Arg Gln Leu Arg Thr Lys Ala Trp Asn
30 35 40 45

agg cag ctg tat cca gag tgg aca gaa gcc cag aga ctt gac tgc tgg 194
Arg Gln Leu Tyr Pro Glu Trp Thr Glu Ala Gln Arg Leu Asp Cys Trp
50 55 60

aga ggt ggt caa gtg tcc ctc aag gtc agt aat gat ggg cct aca ctg 242
Arg Gly Gly Gln Val Ser Leu Lys Val Ser Asn Asp Gly Pro Thr Leu
65 70 75

att ggt gca aat gcc tcc ttc tct att gcc ttg aac ttc cct gga agc 290
Ile Gly Ala Asn Ala Ser Phe Ser Ile Ala Leu Asn Phe Pro Gly Ser
80 85 90

caa aag gta ttg cca gat ggg cag gtt atc tgg gtc aac aat acc atc 338
Gln Lys Val Leu Pro Asp Gly Gln Val Ile Trp Val Asn Asn Thr Ile
95 100 105

atc aat ggg agc cag gtg tgg gga gga cag cca gtg tat ccc cag gaa 386

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Ile Asn Gly Ser Gln Val Trp Gly Gly Gln Pro Val Tyr Pro Gln Glu
110                 115                 120                 125

act gac gat gcc tgc atc ttc cct gat ggt gga cct tgc cca tct ggc   434
Thr Asp Asp Ala Cys Ile Phe Pro Asp Gly Gly Pro Cys Pro Ser Gly
                130                 135                 140

tct tgg tct cag aag aga agc ttt gtt tat gtc tgg aag acc tgg ggc   482
Ser Trp Ser Gln Lys Arg Ser Phe Val Tyr Val Trp Lys Thr Trp Gly
            145                 150                 155

caa tac tgg caa gtt cta ggg ggc cca gtg tct ggg ctg agc att ggg   530
Gln Tyr Trp Gln Val Leu Gly Gly Pro Val Ser Gly Leu Ser Ile Gly
        160                 165                 170

aca ggc agg gca atg ctg ggc aca cac acc atg gaa gtg act gtc tac   578
Thr Gly Arg Ala Met Leu Gly Thr His Thr Met Glu Val Thr Val Tyr
    175                 180                 185

cat cgc cgg gga tcc cgg agc tat gtg cct ctt gct cat tcc agc tca   626
His Arg Arg Gly Ser Arg Ser Tyr Val Pro Leu Ala His Ser Ser Ser
190                 195                 200                 205

gcc ttc acc att act gac cag gtg cct ttc tcc gtg agc gtg tcc cag   674
Ala Phe Thr Ile Thr Asp Gln Val Pro Phe Ser Val Ser Val Ser Gln
                210                 215                 220

ttg cgg gcc ttg gat gga ggg aac aag cac ttc ctg aga aat cag cct   722
Leu Arg Ala Leu Asp Gly Gly Asn Lys His Phe Leu Arg Asn Gln Pro
            225                 230                 235

ctg acc ttt gcc ctc cag ctc cat gac cct agt ggc tat ctg gct gaa   770
Leu Thr Phe Ala Leu Gln Leu His Asp Pro Ser Gly Tyr Leu Ala Glu
        240                 245                 250

gct gac ctc tcc tac acc tgg gac ttt gga gac agt agt gga acc ctg   818
Ala Asp Leu Ser Tyr Thr Trp Asp Phe Gly Asp Ser Ser Gly Thr Leu
    255                 260                 265

atc tct cgg gca cct gtg gtc act cat act tac ctg gag cct ggc cca   866
Ile Ser Arg Ala Pro Val Val Thr His Thr Tyr Leu Glu Pro Gly Pro
270                 275                 280                 285

gtc act gcc cag gtg gtc ctg cag gct gcc att cct ctc acc tcc tgt   914
Val Thr Ala Gln Val Val Leu Gln Ala Ala Ile Pro Leu Thr Ser Cys
                290                 295                 300

ggc tcc tcc cca gtt cca ggc acc aca gat ggg cac agg cca act gca   962
Gly Ser Ser Pro Val Pro Gly Thr Thr Asp Gly His Arg Pro Thr Ala
            305                 310                 315

gag gcc cct aac acc aca gct ggc caa gtg cct act aca gaa gtt gtg   1010
Glu Ala Pro Asn Thr Thr Ala Gly Gln Val Pro Thr Thr Glu Val Val
        320                 325                 330

ggt act aca cct ggt cag gcg cca act gca gag ccc tct gga acc aca   1058
Gly Thr Thr Pro Gly Gln Ala Pro Thr Ala Glu Pro Ser Gly Thr Thr
    335                 340                 345
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tct gtg cag gtg cca acc act gaa gtc ata agc act gca cct gtg cag   1106
Ser Val Gln Val Pro Thr Thr Glu Val Ile Ser Thr Ala Pro Val Gln
350                 355                 360                 365

atg cca act gca gag agc aca ggt atg aca cct gag aag gtg cca gtt   1154
Met Pro Thr Ala Glu Ser Thr Gly Met Thr Pro Glu Lys Val Pro Val
                370                 375                 380

tca gag gtc atg ggt acc aca ctg gca gag atg tca act cca gag gct   1202
Ser Glu Val Met Gly Thr Thr Leu Ala Glu Met Ser Thr Pro Glu Ala
            385                 390                 395

aca ggt atg aca cct gca gag gta tca att gtg gtg ctt tct gga acc   1250
Thr Gly Met Thr Pro Ala Glu Val Ser Ile Val Val Leu Ser Gly Thr
        400                 405                 410

aca gct gca cag gta aca act aca gag tgg gtg gag acc aca gct aga   1298
Thr Ala Ala Gln Val Thr Thr Thr Glu Trp Val Glu Thr Thr Ala Arg
    415                 420                 425

gag cta cct atc cct gag cct gaa ggt cca gat gcc agc tca atc atg   1346
Glu Leu Pro Ile Pro Glu Pro Glu Gly Pro Asp Ala Ser Ser Ile Met
430                 435                 440                 445

tct acg gaa agt att aca ggt tcc ctg ggc ccc ctg ctg gat ggt aca   1394
Ser Thr Glu Ser Ile Thr Gly Ser Leu Gly Pro Leu Leu Asp Gly Thr
                450                 455                 460

gcc acc tta agg ctg gtg aag aga caa gtc ccc ctg gat tgt gtt ctg   1442
Ala Thr Leu Arg Leu Val Lys Arg Gln Val Pro Leu Asp Cys Val Leu
            465                 470                 475

tat cga tat ggt tcc ttt tcc gtc acc ctg gac att gtc cag ggt att   1490
Tyr Arg Tyr Gly Ser Phe Ser Val Thr Leu Asp Ile Val Gln Gly Ile
        480                 485                 490

gaa agt gcc gag atc ctg cag gct gtg ccg tcc ggt gag ggg gat gca   1538
Glu Ser Ala Glu Ile Leu Gln Ala Val Pro Ser Gly Glu Gly Asp Ala
    495                 500                 505

ttt gag ctg act gtg tcc tgc caa ggc ggg ctg ccc aag gaa gcc tgc   1586
Phe Glu Leu Thr Val Ser Cys Gln Gly Gly Leu Pro Lys Glu Ala Cys
510                 515                 520                 525

atg gag atc tca tcg cca ggg tgc cag ccc cct gcc cag cgg ctg tgc   1634
Met Glu Ile Ser Ser Pro Gly Cys Gln Pro Pro Ala Gln Arg Leu Cys
                530                 535                 540

cag cct gtg cta ccc agc cca gcc tgc cag ctg gtt ctg cac cag ata   1682
Gln Pro Val Leu Pro Ser Pro Ala Cys Gln Leu Val Leu His Gln Ile
            545                 550                 555

ctg aag ggt ggc tcg ggg aca tac tgc ctc aat gtg tct ctg gct gat   1730
Leu Lys Gly Gly Ser Gly Thr Tyr Cys Leu Asn Val Ser Leu Ala Asp
        560                 565                 570

acc aac agc ctg gca gtg gtc agc acc cag ctt atc atg cct gtg cct   1778
Thr Asn Ser Leu Ala Val Val Ser Thr Gln Leu Ile Met Pro Val Pro
    575                 580                 585
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ggg att ctt ctc aca ggt caa gaa gca ggc ctt ggg cag gtt cgg ctg   1826
Gly Ile Leu Leu Thr Gly Gln Glu Ala Gly Leu Gly Gln Val Arg Leu
590                 595                 600                 605

atc gtg ggc atc ttg ctg gtg ttg atg gct gtg gtc ctt gca tct ctg   1874
Ile Val Gly Ile Leu Leu Val Leu Met Ala Val Val Leu Ala Ser Leu
                610                 615                 620

ata tat agg cgc aga ctt atg aag caa gac ttc tcc gta ccc cag ttg   1922
Ile Tyr Arg Arg Arg Leu Met Lys Gln Asp Phe Ser Val Pro Gln Leu
            625                 630                 635

cca cat agc agc agt cac tgg ctg cgt cta ccc cgc atc ttc tgc tct   1970
Pro His Ser Ser Ser His Trp Leu Arg Leu Pro Arg Ile Phe Cys Ser
        640                 645                 650

tgt ccc att ggt gag aat agc ccc ctc ctc agt ggg cag cag gtc tga   2018
Cys Pro Ile Gly Glu Asn Ser Pro Leu Leu Ser Gly Gln Gln Val
    655                 660                 665

gtactctcat atgatgctgt gattttcctg gagttgacag aaacacctat atttccccca 2078

gtcttccctg ggagactact attaactgaa ataaatactc agagcctgaa aaa         2131
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<210> 4
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<212> PRT
<213> Homo sapiens

<400> 4

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Ala Leu Leu Ala Val Gly Ala Thr Lys Val Pro Arg Asn Gln Asp Trp
            20                  25                  30

Leu Gly Val Ser Arg Gln Leu Arg Thr Lys Ala Trp Asn Arg Gln Leu
        35                  40                  45

Tyr Pro Glu Trp Thr Glu Ala Gln Arg Leu Asp Cys Trp Arg Gly Gly
    50                  55                  60

Gln Val Ser Leu Lys Val Ser Asn Asp Gly Pro Thr Leu Ile Gly Ala
65                  70                  75                  80

Asn Ala Ser Phe Ser Ile Ala Leu Asn Phe Pro Gly Ser Gln Lys Val
                85                  90                  95

Leu Pro Asp Gly Gln Val Ile Trp Val Asn Asn Thr Ile Ile Asn Gly
            100                 105                 110

Ser Gln Val Trp Gly Gly Gln Pro Val Tyr Pro Gln Glu Thr Asp Asp
        115                 120                 125

Ala Cys Ile Phe Pro Asp Gly Gly Pro Cys Pro Ser Gly Ser Trp Ser
    130                 135                 140
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```
Gln Lys Arg Ser Phe Val Tyr Val Trp Lys Thr Trp Gly Gln Tyr Trp
145                 150                 155                 160

Gln Val Leu Gly Gly Pro Val Ser Gly Leu Ser Ile Gly Thr Gly Arg
                165                 170                 175

Ala Met Leu Gly Thr His Thr Met Glu Val Thr Val Tyr His Arg Arg
            180                 185                 190

Gly Ser Arg Ser Tyr Val Pro Leu Ala His Ser Ser Ser Ala Phe Thr
        195                 200                 205

Ile Thr Asp Gln Val Pro Phe Ser Val Ser Val Ser Gln Leu Arg Ala
    210                 215                 220

Leu Asp Gly Gly Asn Lys His Phe Leu Arg Asn Gln Pro Leu Thr Phe
225                 230                 235                 240

Ala Leu Gln Leu His Asp Pro Ser Gly Tyr Leu Ala Glu Ala Asp Leu
                245                 250                 255

Ser Tyr Thr Trp Asp Phe Gly Asp Ser Ser Gly Thr Leu Ile Ser Arg
            260                 265                 270

Ala Pro Val Val Thr His Thr Tyr Leu Glu Pro Gly Pro Val Thr Ala
        275                 280                 285

Gln Val Val Leu Gln Ala Ala Ile Pro Leu Thr Ser Cys Gly Ser Ser
    290                 295                 300

Pro Val Pro Gly Thr Thr Asp Gly His Arg Pro Thr Ala Glu Ala Pro
305                 310                 315                 320

Asn Thr Thr Ala Gly Gln Val Pro Thr Thr Glu Val Val Gly Thr Thr
                325                 330                 335

Pro Gly Gln Ala Pro Thr Ala Glu Pro Ser Gly Thr Thr Ser Val Gln
            340                 345                 350

Val Pro Thr Thr Glu Val Ile Ser Thr Ala Pro Val Gln Met Pro Thr
        355                 360                 365

Ala Glu Ser Thr Gly Met Thr Pro Glu Lys Val Pro Val Ser Glu Val
    370                 375                 380

Met Gly Thr Thr Leu Ala Glu Met Ser Thr Pro Glu Ala Thr Gly Met
385                 390                 395                 400

Thr Pro Ala Glu Val Ser Ile Val Val Leu Ser Gly Thr Thr Ala Ala
                405                 410                 415

Gln Val Thr Thr Thr Glu Trp Val Glu Thr Thr Ala Arg Glu Leu Pro
            420                 425                 430

Ile Pro Glu Pro Glu Gly Pro Asp Ala Ser Ser Ile Met Ser Thr Glu
        435                 440                 445

Ser Ile Thr Gly Ser Leu Gly Pro Leu Leu Asp Gly Thr Ala Thr Leu
    450                 455                 460
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Arg Leu Val Lys Arg Gln Val Pro Leu Asp Cys Val Leu Tyr Arg Tyr
465                 470                 475                 480

Gly Ser Phe Ser Val Thr Leu Asp Ile Val Gln Gly Ile Glu Ser Ala
                485                 490                 495

Glu Ile Leu Gln Ala Val Pro Ser Gly Glu Gly Asp Ala Phe Glu Leu
            500                 505                 510

Thr Val Ser Cys Gln Gly Gly Leu Pro Lys Glu Ala Cys Met Glu Ile
        515                 520                 525

Ser Ser Pro Gly Cys Gln Pro Pro Ala Gln Arg Leu Cys Gln Pro Val
    530                 535                 540

Leu Pro Ser Pro Ala Cys Gln Leu Val Leu His Gln Ile Leu Lys Gly
545                 550                 555                 560

Gly Ser Gly Thr Tyr Cys Leu Asn Val Ser Leu Ala Asp Thr Asn Ser
                565                 570                 575

Leu Ala Val Val Ser Thr Gln Leu Ile Met Pro Val Pro Gly Ile Leu
            580                 585                 590

Leu Thr Gly Gln Glu Ala Gly Leu Gly Gln Val Arg Leu Ile Val Gly
        595                 600                 605

Ile Leu Leu Val Leu Met Ala Val Val Leu Ala Ser Leu Ile Tyr Arg
    610                 615                 620

Arg Arg Leu Met Lys Gln Asp Phe Ser Val Pro Gln Leu Pro His Ser
625                 630                 635                 640

Ser Ser His Trp Leu Arg Leu Pro Arg Ile Phe Cys Ser Cys Pro Ile
                645                 650                 655

Gly Glu Asn Ser Pro Leu Leu Ser Gly Gln Gln Val
            660                 665
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<210> 7
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